

THE ROLE OF THE DENTIST IN CARING FOR PATIENTS WITH CLEFT LIP AND PALATE: A LITERATURE REVIEW

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Abstract: Introduction: Cleft lip and palate are innate deformities in the anatomical fusion of facial processes. Objective: This literature review aims to highlight the relevance of the team of health professionals in providing a better quality of life to the patient. Methodology: The databases used were Pubmed and SciELO, in English, Portuguese and Spanish. Fifty-six articles were analyzed, of which only 13 met the inclusion criteria. Results: Since it is an opening in the lip and/or palate region, with multifactorial etiology presenting several consequences, dental follow-up is guided by the complexity of the cases. Conclusion: The dentist plays an essential role throughout the patient's life, acting in both therapeutic and preventive ways, ensuring a comprehensive approach that includes functional, emotional and social aspects. Integration among health professionals is essential for effective rehabilitation and for improving the quality of life of these patients.

Keywords: Cleft Lip and Palate, Congenital Abnormality, Pediatric Dentistry.

INTRODUCTION

Cleft lip and palate are congenital malformations (CM) resulting from defects in the anatomical fusion of facial processes that can be classified, in terms of anatomical location, as: cleft lip, cleft palate, cleft lip and palate and rare cleft of the face. As for the extension, they can be: complete or incomplete, unilateral or bilateral, CM being any failure in the constitution of an organ or groups of organs in the embryonic period, which may be caused by genetic or environmental factors or a combination of them, resulting in a morphological, structural or functional anomaly. (Cunha et al. 2021)

The etiology of cleft lip and palate is still a point discussed in the literature, although studies show that nutritional deficiency, alcoholism, smoking, drug use and heredity are associated with malformation.

This anomaly occurs between the sixth and tenth gestational week, and its incidence is 1 in every 650 children born, it is more common on the left side of the face and in males. (Moretto et al., 2020)



Individuals with cleft lip and palate may point to difficulties in performing basic daily functions such as feeding, phonation, breathing, hearing and can also trigger serious psychological disorders, so a multidisciplinary approach is necessary, and there should be an approximation between professionals, patients and family in order to know their general health, in order to better treat them. (Costa et al. 2020)

The dental surgeon plays a crucial role from the diagnosis to the treatment of cleft patients, and it is exceptional to provide strict guidance on the child's oral hygiene so that it prevents infections, especially during the reconstructive surgeries that they are subject to during their treatment. (Costa, 2011)

Therefore, this review aims to highlight the relevance of the performance of the multidisciplinary team of health professionals in the treatment of patients with cleft lip and palate, highlighting its importance for improving the quality of life of these individuals. To this end, aspects related to the etiology of the condition, the available therapeutic options, and the role of different health professionals in the treatment protocol will be addressed, emphasizing interdisciplinary collaboration to optimize the clinical and functional outcomes of patients.

METHODOLOGY

The present study is an integrative literature review, carried out through a bibliographic survey in the Pubmed and SciElo databases. For the research, the DeCS descriptors were used: Cleft Lip and Palate, Congenital Abnormality, Pediatric Dentistry, while in the English descriptor platforms, the following MeSH descriptors were used: Cleft Lip and Palate, Congenital Abnormality, Pediatric Dentistry.

In all, 56 articles were analyzed, of which only 13 met the inclusion criterion and were chosen to compose the study. Covering the inclusion criteria, articles published between 2007 and 2022, in Portuguese, English, and Spanish, that addressed management, treatment, the multidisciplinary team, and its importance in the treatment of patients affected by cleft lip and palate. Regarding the exclusion



criteria, articles that were published before 2007 that did not address the theme and studies of the congress abstract type.

DISCUSSION

Cleft lip and palate are congenital facial malformations, which occur during the formation and development of the fetus, characterized by an opening in the lip and/or palate region, caused by the non-closure of these structures. It is one of the most complex orofacial alterations with several consequences, such as malocclusion, feeding, swallowing, phonation and breathing problems, presenting with different signs and symptoms, in which treatment needs to be carried out through a multidisciplinary team in the patient's rehabilitation and social reintegration process. (Martins et al., 2021)

It has a multifactorial etiology, which makes it quite complex, and may involve genetic and environmental factors or their association. Environmental aspects include nutritional deficiencies, infections, abusive and unnecessary intake of medications, ionizing radiation, stress, drug use, and maternal smoking during pregnancy. There is also the action of genetic factors, as most patients with clefts have family members with this malformation. (Costa et al., 2021)

With a view to a better quality of life, the treatment should be multidisciplinary, encompassing medical, dental, speech therapist and psychosocial specialties. Early surgery is essential to improve speech and nutrition functions, which, as it is a patient of great complexity, must have a correct diagnosis until complete rehabilitation. (Souza et al., 2022)

It is worth noting that it is essential before any surgery, prior treatment so that the patient is in good systemic conditions. The care protocol is divided into stages, pre-surgical, trans and post-surgical. After undergoing the surgical procedures mentioned above, orthodontic treatment is necessary for the rehabilitation of these patients, helping in the orientation, growth and development of the maxillomandibular (Do Nascimento et al., 2019)

The responsibility of the dental surgeon is intrinsically linked to the patient and his support



network, in order to know his general health, so that it is possible to provide him with adequate care. The success of the treatment will depend on how it will be conducted by the patient, caregiver and professional; The dental surgeon will integrate preventive and oral rehabilitation measures, where the use of a clinical protocol is indispensable, which is essential to manage the treatment and rehabilitation of patients, in addition to providing guidance on the oral hygiene procedure that should be performed. In this same bias, there are particularities related to the deciduous and permanent dentitions of cleft children and important reasons for the systematic follow-up of the pediatric dentist throughout the process. The professional must demonstrate patience to establish effective communication, especially in the early stages, since speech and hearing difficulties are frequent in patients with cleft lip and palate. (Kuhn et al., 2012)

Treatment steps:

- In the first three months of the child's life, information is passed on to the family about the treatment, speech therapy begins to work in an attempt to improve the child's sucking; pediatric dentistry does preventive procedures and food education; The prosthetist can contribute to the making of an acrylic plate to seal the crack and facilitate the child's feeding. The occupational therapist will teach feeding techniques to the child's parents along with the dietitian.
- During the child's second trimester, if the child is in good clinical condition, cheiloplasty is performed by the plastic or maxillofacial surgeon. From the sixth to the twelfth month, basic clinical therapy is continued with nutrition, speech therapy, occupational therapy, pediatric dentistry, periodontics, pediatrics, nursing, psychology, social work and hearing evaluations with the ENT every six months. (10)
- Between the twelfth and fifteenth month, in order to avoid disordered maxillofacial growth and provide an improvement during speech, palatoplasty surgery is performed, a surgery aimed at reconstructing the palate. (Tuji et al., 2009; Silva Filho & Souza Freitas, 2007)



- Up to the fifth year of life, the patient is monitored by pediatrics, psychology, speech therapy (voice laboratory), nutrition, periodontics, prosthetics, pediatric dentistry, orthodontics, nursing, otorhinolaryngology and the refinement of the surgery. Between the ages of seven and nine, a preventive procedure is performed on the child's mixed dentition by the orthodontist, where most of the craniofacial growth occurs. Thus, the secondary bone graft is performed by the oral and maxillofacial surgeon. From the age of nine until the age of majority, the corrective treatment of the teeth by the orthodontist begins and, if necessary, the patient will be submitted to orthognathic surgery by the oral and maxillofacial surgeon. (Tuji et al., 2009)

Dental follow-up should be performed every six months or, in more complex cases, more frequently. Control and prevention should be emphasized in all phases of dentition, starting soon after birth, and treatment is indicated according to the needs of each patient and the period of life in which they are. (Silva Filho & Souza Freitas, 2007) The knowledge of these small cares by the dental surgeon provides local care to these patients, avoiding displacement and care in specialized centers, this is essential for the maintenance of the oral health of these patients. (Lorenzoni; Prisoner; Locks, 2010)

The care of patients with cleft lip and palate is not common in the daily clinical practice of dental surgeons, which can generate uncertainties regarding the therapeutic approach and the specific needs of these patients. Therefore, it is crucial to have prior knowledge when faced with these cases, in order to ensure appropriate management, considering the importance of intervention at the appropriate time to obtain the best orthopedic results. (Bathia & Collard, 2012)

FINAL CONSIDERATIONS

In view of the above, it is evident that the performance of the multidisciplinary team is indispensable in the treatment of patients with cleft lip and palate, enabling a comprehensive and



personalized approach. Thus, the integration between different health professionals allows for a more effective follow-up, ranging from diagnosis to oral rehabilitation, promoting significant improvements in the quality of life of patients. Thus, this integration of knowledge and specialties is essential to optimize clinical, functional, and psychosocial outcomes, reinforcing the importance of coordinated and humanized therapeutic strategies.

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